

IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1 to 12 (canceled).

Claim 13 (currently amended): A PWR nuclear fuel assembly comprising:
nuclear fuel rods disposed in a substantially regular array, the array having a peripheral layer of fuel rods constituting a closed loop and an adjacent layer of fuel rods, the adjacent layer constituting a closed loop of fuel rods adjacent to and surrounded by the peripheral layer;
a supporting skeleton having two nozzles;
guide tubes for receiving control rods, said guide tubes interconnecting the nozzles;
and
spacer grids for holding the fuel rods, wherein the grids are secured to the guide tubes, the assembly further comprising:
at least one lattice reinforcing device for reinforcing the support skeleton, the lattice reinforcing device being disposed between two spacer grids and being secured to the guide tubes,
wherein the lattice reinforcing device does not extend between the fuel rods of the peripheral layer and between the fuel rods of the adjacent layer.

Claims 14 to 15 (canceled).

Claim 16 (previously presented): The assembly according to claim 13, wherein the lattice reinforcing device does not have an arrangement for mixing a cooling fluid that is to flow

through the nuclear fuel assembly.

Claim 17 (previously presented): The assembly according to claim 13, wherein the lattice reinforcing device does not have an arrangement for holding nuclear fuel rods.

Claim 18 (previously presented): The assembly according to claim 13, wherein the lattice reinforcing device comprises two sets of crossed plates that are secured to one another, the plates defining between them cells for receiving guide tubes and cells for receiving nuclear fuel rods.

Claim 19 (previously presented): The assembly according to claim 17, wherein the lattice reinforcing device comprises:

two sets of crossed plates that are secured to one another, the plates defining between them cells for receiving guide tubes and cells for receiving nuclear fuel rods, and wherein the cells for receiving nuclear fuel rods are of dimensions greater than dimensions of the fuel rods so as to receive the fuel rods with clearance.

Claim 20 (currently amended): A PWR nuclear fuel assembly comprising:

nuclear fuel rods;
a supporting skeleton having two nozzles;
guide tubes for receiving control rods, said guide tubes interconnecting the nozzles;
and

spacer grids for holding the fuel rods, wherein the grids are secured to the guide tubes, the assembly further comprising:

at least one lattice reinforcing device for reinforcing the support skeleton, the lattice reinforcing device being disposed between two spacer grids and being secured to the guide tubes,

wherein the lattice reinforcing device does not have an arrangement for mixing a cooling fluid that is to flow through the nuclear fuel assembly, and wherein the lattice

reinforcing device does not have an arrangement for holding nuclear fuel rods.

Claim 21 (previously presented): The assembly according to claim 20, wherein the nuclear fuel rods are disposed in a substantially regular array, the array having a peripheral layer of fuel rods constituting a closed loop, and wherein the lattice reinforcing device does not extend between the fuel rods of the peripheral layer.

Claim 22 (previously presented): The assembly according to claim 21, wherein the array has a layer of fuel rods adjacent to the peripheral layer, the adjacent layer constituting a closed loop of fuel rods adjacent to and surrounded by the peripheral layer, and wherein the lattice reinforcing device does not extend between the fuel rods of the peripheral layer and between the fuel rods of the adjacent layer.

Claim 23 (canceled).

Claim 24 (previously presented): The assembly according to claim 20, wherein the lattice reinforcing device comprises two sets of crossed plates that are secured to one another, the plates defining between them cells for receiving guide tubes and cells for receiving nuclear fuel rods.

Claim 25 (currently amended): The assembly according to claim 23 20, wherein the lattice reinforcing device comprises:

two sets of crossed plates that are secured to one another, the plates defining between them cells for receiving guide tubes and cells for receiving nuclear fuel rods, and wherein the cells for receiving nuclear fuel rods are of dimensions greater than dimensions of the fuel rods so as to receive the fuel rods with clearance.

Claim 26 (previously presented): A PWR nuclear fuel assembly comprising:
nuclear fuel rods disposed in a substantially regular array, the array having a

peripheral layer of fuel rods constituting a closed loop;
a supporting skeleton having two nozzles;
guide tubes for receiving control rods, said guide tubes interconnecting the nozzles;
and
spacer grids for holding the fuel rods, wherein the grids are secured to the guide tubes,
the assembly further comprising:
at least one lattice reinforcing device for reinforcing the support skeleton, the
lattice reinforcing device being disposed between two spacer grids and being secured to the
guide tubes,
wherein the lattice reinforcing device does not extend between the fuel rods of
the peripheral layer, and wherein the lattice reinforcing device does not have an arrangement
for holding nuclear fuel rods.

Claim 27 (previously presented): The assembly according to claim 26, wherein the array
has a layer of fuel rods adjacent to the peripheral layer, the adjacent layer constituting a
closed loop of fuel rods adjacent to and surrounded by the peripheral layer, and wherein the
lattice reinforcing device does not extend between the fuel rods of the peripheral layer and
between the fuel rods of the adjacent layer.

Claim 28 (previously presented): The assembly according to claim 26, wherein the lattice
reinforcing device does not have an arrangement for mixing a cooling fluid that is to flow
through the nuclear fuel assembly.

Claim 29 (previously presented): The assembly according to claim 26, wherein the lattice
reinforcing device comprises two sets of crossed plates that are secured to one another, the
plates defining between them cells for receiving guide tubes and cells for receiving nuclear
fuel rods.

Claim 30 (previously presented): The assembly according to claim 26, wherein the lattice

reinforcing device comprises:

two sets of crossed plates that are secured to one another, the plates defining between them cells for receiving guide tubes and cells for receiving nuclear fuel rods, and wherein the cells for receiving nuclear fuel rods are of dimensions greater than dimensions of the fuel rods so as to receive the fuel rods with clearance.